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- 8 -

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Patent claim

1. A vacuum contactor having a contactor housing (1),
 a drive coil (2), an armature (3), an operating element
 5 (4) and at least one vacuum contact,
 - with the drive coil (2) deflecting the armature
 (3) from an armature rest position (AR) to an
 armature operating position (AB) when a pull-in
 current (IA) is applied,
 10 - with the deflection of the armature (3) causing
 the operating element (4) to be deflected from an
 element rest position (ER) to an element operating
 position (EB), and
 - with the deflection of the operating element (4)
 15 resulting in closing of the at least one vacuum
 contact,
 - with, when the armature (3) is deflected from the
 armature rest position (AR) to the armature
 operating position (AB), the armature (3) first of
 20 all passing through an initial movement distance
 (sV), and then passing through a driving movement
 distance (sM),
 - with the operating element (4) being deflected by
 the armature (3) only while the latter is passing
 25 through the driving movement distance (sM),
 - with the operating element (4) always either
 remaining in the element rest position (ER) or
 being deflected completely to the element
 operating position (EB) when a current that is
 30 less than the pull-in current (IA) is applied to
 the drive coil (2).

while it is passing through the driving movement distance (sM), and in that the initial movement force (FV) is less than the driving force (FM).

- 5 5. The vacuum contactor as claimed in claim 4,
characterized
in that the ratio of the initial movement force (FV) to
the driving force (FM) is between 1:10 and 1:2.
- 10 6. The vacuum contact as claimed in claim 5,
characterized
in that the ratio of the initial movement force (FV) to
the driving force (FM) is between 1:5 and 1:4.
- 15 7. The vacuum contactor as claimed in claim 4, 5
or 6,
characterized in that the initial movement force (FV)
is applied by an initial movement spring device (6),
and the driving force (FV) is applied by a driving
20 spring device (7), in that the initial movement spring
device (6) is supported firstly on the armature (3) and
secondly on the operating element (4), and in that the
driving spring device (7) is supported firstly on the
operating element (4) and secondly on the contactor
25 housing (1).
8. The vacuum contactor as claimed in one of the
above claims,
characterized
30 in that the operating element (4) has a stop (12),
against which the armature (3) is moved when it is
deflected from the armature rest position (AR).